

Tunable Electrooptic Add-drop Filter Apparatus and Method

Abstract

In filters fabricated on a birefringent electrooptic substrate (28), a tunable electrooptic add-drop filter apparatus (10) includes two input single mode waveguides (44) and a first beam splitter (24) connected to the waveguides (44). A polarization converter (42) is connected to the waveguides (44) after the first beam splitter (24) wherein each polarization converter (42) includes more than one set of spaced apart, spatially periodic, strain-inducing pads (18). Electrode(s) (30) are provided in proximity to the polarization converter (42). A second beam splitter (24) is provided connected to the waveguides (44) after the polarization converter (42). Finally, two output single mode waveguides (48) are connected to the second beam splitter (24).